



Public Service Commission of Wisconsin

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Public Service Commission of Wisconsin
RECEIVED: 09/01/09, 2:05:52 PM

August 31, 2009

Re: Investigation of Area Code Relief for the 715 Area Code in
Northern Wisconsin

5-TN-100

Investigation of Area Code Relief for the 920 Area Code

5-TN-106

To: Wisconsin Electric, Gas and Water Utilities

As you may already know, Wisconsin has two area codes that are expected to exhaust within the next few years. Because these on-going relief efforts may have a direct impact on your call center, metering and/or monitoring operations, the Public Service Commission (Commission) is reaching out to provide you with background information regarding area code relief, the Commission's recent decisions and the potential implications that these decisions may have on your utility operations.

Background: In recent years, the prevalence of telecommunications technologies in everyday life has increased tremendously. Many households no longer have a single phone number for the entire family. Instead, customers often have multiple telephone lines, multiple cell phones and Internet access. Business customers also have many diverse telephone number needs. The combined effects of new technologies, new telecommunications providers requiring their own telephone numbering inventories and the increased demand for telecommunications services in general have strained existing telephone number resources, both in Wisconsin and across the country. This rapid growth in demand for telephone numbers has resulted, in many places, a condition known as area code "exhaust." An area code reaches exhaust when all of the available central office codes within that area code have been assigned. Area code relief, by means of an overlay or a geographic split, must then be implemented to ensure that an adequate supply of telephone numbers remains available for assignment.

An overlay occurs when more than one area code serves the same geographic area. Relief is provided by introducing a new area code within the same geographic region as the area code that is exhausting. With an overlay, all current customers are able to retain their existing area code and 7-digit telephone number. Eventually, in some locations, telephone numbers with the new area code will be assigned to new customers requesting service, as well as to existing customers ordering additional lines. Because both area codes will reside within the same geographic area, all local calls must be dialed using the area code and the 7-digit telephone number (10-digit dialing).

The second method of providing area code relief is a geographic split. With a split, the geographic area served by an existing area code is split into two smaller areas. One of the sections retains the existing area code while the other section receives a new area code. As a result, splits require an area code change for approximately one-half of the customers. Stationery, business cards, advertising and other written materials that include a telephone number need to be revised by those customers receiving the new area code. Additionally,

affected customers need to inform friends, relatives, vendors and others that call them that their area code has changed.

Wisconsin currently has two area codes that are expected to exhaust within the next three years. Based on the most recent projections, the 715 area code is expected to exhaust in the third quarter of 2011, while the 920 area code is expected to exhaust in the fourth quarter of 2012. Dockets to investigate area code relief in these areas were opened in 2007. Commission staff worked extensively to inform the public of the pending relief efforts, to educate the public about the potential relief alternatives and to solicit both public and Industry comments in these proceedings. In addition, staff initiated several number resource optimization measures (including voluntary thousands-block numbering pooling, mandatory pooling, and reclamation of unused numbering resources and stringent reviews of safety valve appeals) in an effort to conserve numbering resources and to forestall the need for area code relief in the state.

The Decision: Despite the efforts of Commission staff and Wisconsin's telecommunications industry, area code relief is needed in the near future. The Commission considered the 715 and 920 area code relief dockets (5-TN-100 and 5-TN-106, respectively) at an open hearing on November 6, 2008. As the Commissioners noted in their deliberations, there is no option for area code relief that pleases everyone. Both methods of relief, either an overlay or a geographic split, have perceived "pros and cons." However, for the 715 and 920 area codes the Commission found that an overlay is the best alternative because it allows for the most efficient use of Wisconsin's new numbering resources, it minimizes many potential implementation problems and because it does not impose a financial burden on those customers forced to change their area code. The Final Decisions were issued on December 8, 2008. You may view these orders on the Commission's website. The 715 order is available at: http://psc.wi.gov/apps/erf_share/view/viewdoc.aspx?docid=105411 and the 920 order is available at: http://psc.wi.gov/apps/erf_share/view/viewdoc.aspx?docid=105412.

The North American Numbering Plan Administration (NANPA) has assigned the 534 area code to overlay the existing 715 area code, while the 274 area code has been assigned to overlay the 920 area code.

Implementation Considerations and Schedule: NANPA indicated that the nearly coincidental exhaust of two adjacent area codes is unique to Wisconsin. The 715 and 920 area code boundaries are contiguous for a few hundred miles from Coloma to Peshtigo. The geographic and temporal proximity of these areas, as well as the potential for dual permissive dialing periods, created unique customer education and technical challenges related to the implementation of the new area codes. In order to minimize these potential problems, the Commission's orders adopted Industry's strong recommendation that the 715/534 overlay be fully implemented prior to start of the 920/274 relief efforts. NANPA conducted the initial Implementation Meeting for the 715/534 overlay on December 10, 2008. At that time, Industry reached consensus on the following implementation schedule:

715/534 Overlay Schedule	Time	Date
Start of Permissive 10-digit Dialing*	12:01 am CST	Saturday, 10-17-09
Start of Mandatory 10-digit Dialing**	12:01 am CST	Saturday, 07-17-10
Earliest NXX code Activation Date		Saturday, 08-14-10
Earliest date that Industry may request NXX codes from the 534 area code		Sunday, 02-14-10

* During the permissive 10-digit dialing period, customers are educated (through advertising, bill inserts, media sources and public announcements) about the upcoming changes and are encouraged to begin using the current area code and the 7-digit number to place all local calls within the area code. However, during the permissive dialing period, local calls will still complete if a caller dials only the 7-digit number.

** Once mandatory 10-digit dialing begins, callers must use the area code and the 7-digit number for all local calls. Calls incorrectly dialed will be transferred to a recording indicating that it is necessary to dial the area code and the 7-digit telephone number.

NANPA conducted the initial Implementation Meeting for the 920/274 overlay on December 11, 2008. At that time, Industry reached census on the following implementation schedule:

920/274 Overlay Schedule	Time	Date
Start of Permissive 10-digit Dialing	12:01 am CST	Saturday, 05-14-11
Start of Mandatory 10-digit Dialing	12:01 am CST	Saturday, 02-11-12
Earliest NXX code Activation Date		Saturday, 03-10-12
Earliest date that Industry may request NXX codes from the 274 area code		Saturday, 09-10-11

Potential Impact on Wisconsin Utilities: In addition to the network preparations currently underway, there are many issues that businesses located within the 715 and 920 area codes will also need to address prior to the start of mandatory 10-digit dialing. Businesses should:

- Review and update equipment such as life safety systems, fax machines, private dial access entry systems and PBXs as necessary.
- Review and update other sophisticated telecommunications services such as outbound auto-dialers, message detail recording equipment, alternate route or least-cost routing systems, toll restriction arrangements, cellular telephone service, alarm circuits, computer

modems, credit card verification machines and operator escape and/or paging options associated with voice mail.

- Review and update all printed materials such as web pages, stationery, checks, business cards, advertisements, promotional items, brochures and catalogs to reflect your 10-digit telephone numbers.
- Inform employees and customers about the new 10-digit dialing requirement in the area and the need to dial ***all local calls*** by using 10 digits.
- Notify alarm service providers of the 10-digit dialing requirement so that alarm records and equipment can be reviewed updated as needed.
- Test all telephone equipment to determine if it can dial and accept 10-digit dialed calls.

Prior to the start of mandatory 10-digit dialing, a test number will be available to allow business customers to verify that their equipment can complete calls to the new area code. In the 715/534 area, two test numbers will be available from May 14, 2010, to September 14, 2010. The test numbers are (534) 222-8378 (TEST) and (534) 534-1534. Any specific questions that you may have regarding the programming of your equipment should be directed to your equipment vendor(s). Please note, ***any modifications to your equipment that may be needed to accommodate 10-digit dialing must be made after the permissive dialing period begins and prior to the start of mandatory 10-digit dialing.*** This means that all equipment changes must be completed between October 17, 2009, and July 16, 2010, in the 715/534 area and between May 14, 2011 and February 10, 2012, in the 920/274 area.

During the course of the area code investigations, it came to light that many energy and water utilities across the state use automatic meter readers (AMR) or other monitoring devices that transmit data over telephone lines or Digital Communications Devices. Because telephone calls are a part of *some* AMR processes, the 715/534 and 920/274 overlays may have a direct impact on these systems as well. As previously noted, all local calls originating from the 715 or 920 area codes will need to include the area code once mandatory 10-digit dialing has been implemented. This dialing requirement extends to all equipment that is currently pre-programmed to dial a local number, such as AMRs, alarms, fax machines and auto-dialers. Equipment that is not modified prior to the start of mandatory 10-digit dialing will fail to operate correctly once area code relief is finally implemented. Failure to review and modify the programming of your AMR equipment (as necessary) may have a direct negative impact on your customer billings once mandatory 10-digit dialing begins in these area codes.

Dockets 5-TN-100, 5-TN-106

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I appreciate you taking the time to review this important information. You may also visit the Commission's website at: <http://psc.wi.gov/utilityinfo/tele/areaCodes/home-AreaCodeRelief.htm> for additional information regarding area code relief. Please don't hesitate to call me at (608) 267-9254 with any questions or concerns that you may have.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kathleen Bakke', with a long horizontal flourish extending to the right.

Kathleen Bakke
Program and Policy Analyst
Telecommunications Division

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cc: Wisconsin Rural Water Association
Wisconsin Water Association
Municipal Electric Utilities of Wisconsin
Wisconsin Utilities Association